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| 10/676,775  | 10/01/2003  | Kirk Charles Frederickson | 67,008-076; S-5656         | 7918             |
| 26096 7590 04/04/2007<br>CARLSON, GASKEY & OLDS, P.C.<br>400 WEST MAPLE ROAD<br>SUITE 350<br>BIRMINGHAM, MI 48009 |             |                           | EXAMINER<br>KIM, CHONG HWA |                  |
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**APR 04 2007**

**Technology Center 2100**

**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

Application Number: 10/676,775

Filing Date: October 01, 2003

Appellant(s): FREDERICKSON, KIRK CHARLES

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David Wisz  
For Appellant

**EXAMINER'S ANSWER**

This is in response to the appeal brief filed Mar 13, 2007 appealing from the Office action mailed

Jul 14, 2006.

**(1) Real Party in Interest**

A statement identifying by name the real party in interest is contained in the brief.

**(2) Related Appeals and Interferences**

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

**(3) Status of Claims**

The statement of the status of claims contained in the brief is correct.

**(4) Status of Amendments After Final**

No amendment after final has been filed.

**(5) Summary of Claimed Subject Matter**

The summary of claimed subject matter contained in the brief is correct.

**(6) Grounds of Rejection to be Reviewed on Appeal**

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

**(7) Claims Appendix**

The copy of the appealed claims contained in the Appendix to the brief is correct.

**(8) Evidence Relied Upon**

2,309,172

Kanski

01-1943

**(9) Grounds of Rejection**

The following ground(s) of rejection are applicable to the appealed claims:

Art Unit: 2167

Claims 1, 2, 4, 5, 7, 23, and 24 are rejected under 35 U.S.C. 102(b) as being anticipated by Kanski, U.S. Patent 2,309,172.

Kanski shows, in Figs. 1 and 2, a force generator comprising;

a rotationally fixed first circular member 64 defined about a first axis (about shaft 52) to define a first inner diameter circular path, the first circular member having a first radius;

a second circular member 55 defined about a second axis (about element 54) offset from the first axis to define a second radius, the second radius being one-half the first radius, the second circular member movable about the circular path to simultaneously complete one revolution about the second axis and one orbit around the first axis;

a mass 56 located adjacent a circumference of the second circular member to generate a vibratory inertial force;

wherein the vibratory inertial force is a sinusoidal inertial force in a straight line (dsub1);

wherein the path of the mass is two-cusp hypocycloid (dsub1);

wherein the first circular member comprises a ring gear;

wherein the second circular member comprises a planet gear;

further comprising a crank 53 which mounts the second circular member, the crank rotates about the first axis;

further comprising a motor, which drives the crank (as describes on page 4, second column, lines 65-68), having a controller (inherent since all motors have some sort of a switch that controls "on" and/or "off" position of the motor) that drives the motor to control the vibratory inertial force.

Art Unit: 2167

**(10) Response to Argument****§112 REJECTIONS**

In regards to the appellant's argument concerning the rejections under 35 USC §112, first and second paragraphs, the Examiner agrees with the appellant and therefore withdraws the rejections. It is understood that the term "rotationally fixed" does not raise new matter issue and the description is supported in the original specification or the drawings as filed. Furthermore, such term is interpreted as being fixed and not rotatable about the axis, as the appellant suggests and explains. It is also noted that the two-cusp hypocycloid path would be unachievable were the first member not "rotationally fixed", as explained in detail on pages 9-10 of the Appellant's Appeal Brief.

**§102 REJECTIONS**

In response to the appellant's argument that Kanski fails to show the first circular member being rotationally fixed, it is the Examiner's position that the first circular member 64 is rotationally fixed as recited in claim 1 and as interpreted according to the appellant's definition. Kanski discloses, in Figs. 1-2, and on page 5, in the first column, lines 23-26, that the "(m)ember 52 may be rotated while member 63 is kept stationary." The first circular member 64 is connected to the member 63 and the second circular member 55 is connected to the member 52. As the member 52 rotates, the second circular member 55 rotates relative to the first circular member 64. Such rotational movement is diagrammed in Fig. 2. As disclosed on page 3, in the first column, line 65, Fig. 2 shows the gear ratio of 1:2, that is the radius of the second circular

Art Unit: 2167

member 55 being one-half the radius of the first circular member 64 as recited in the claim. As the second circular member 55 rotates about the first circular member 64, a path (d sub 1 in Fig. 2) of a two-cusp hypocycloid is created. Such path is the straight line that defines the up and down movement of the mass 56 when the mass 56 is located at the point where the first and second circular members meet as shown in Fig. 2 (see page 6, first column, lines 10-15). As the appellant points out correctly, such straight line cannot be formed if the first circular member 64 is not "rotationally fixed". In other words, the straight line (d sub 1) in Fig. 2 can only be realized if the first circular member 64 is "rotationally fixed". Therefore, as evidenced by the disclosure in the specification and the drawings of Kanski, it is the Examiner's view that the first circular member 64 must be "rotationally fixed" as recited in claim 1.


**(11) Related Proceeding(s) Appendix**

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.


Respectfully submitted,


chk



CHONG H. KIM  
PRIMARY EXAMINER

Conferees:

Chong H. Kim (Primary Examiner) 

Hosain Alam (SPE) 

Lynne Browne (Appeal Conference Specialist)



HOSAIN ALAM  
SUPERVISORY PATENT EXAMINER



Lynne H. Browne  
Appeal Specialist, TQAS  
Technology Center 2100